Attorney Docket No. VIGN1160-1

Customer ID: 44654

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## IN THE SPECIFICATION:

Please amend the specification to correct typographical errors as indicated below.

Please amend paragraph 0015 as shown:

It is to be understood that both the foregoing general description and the following detailed description are exemplary and explanatory only are and not restrictive of the invention, as claimed.

Please amend paragraph 0016 as shown:

The accompanying drawings, which are incorporated in and constitute a part of this specification, illustrate ene several embodiments of the invention and together with the description, serve to explain the principles en of the invention.

Please amend paragraph 0036 as shown:

Fortunately there is an entire field which studies the problem of laying out graphs, called *Graph Drawing*. Graph Drawing algorithms have attracted much attention as of late because of their application in circuit design. A new circuit design needs to be laid out on a 2D wafer, so that the total number of wire crossings are is kept to a minimum. Also, the surface area of the circuit should be kept low as possible to again minimize on material used and also operational speeds and tolerances. The same techniques for optimizing layout according to some predefined criteria, can be applied in making non-circuit graphs easier to read and navigate.

Please amend paragraph 0071 as shown:

[0001] Generally, in economics it is important to identify is which products are substitutes and compliments. For example, Wieners and ketchup are complimentary, while Tide and Arm and Hammer laundry detergent are <u>supplementary</u> supplimentary.

Please amend paragraph 0080 as shown:

Fig. 6 depicts Tables 4 and 5 depict affinities sorted in order of lift-affinity. Fig. 6 Table 4 further illustrates that for the "products which make sense" all are sorted to the top. For yogurt yogart, the top lift affinities are pop-tarts, apples, bananas. The bottom lift-affinities are smoking accessories, pepperoni pepperoni pizza and fish fry. This implies that consumers who buy yogurt yogart tend to buy healthy foods, rather than smoking accessories, fish fry or pepperoni pepperoni pizza.

Please amend paragraph 0081 as shown. Note that the added sentence is merely a duplicate of paragraph [0023] of the specification. Thus, no new matter is presented.

Fig. 76 illustrates a basic affinity graph for a retailer, wherein the cluster is in school/stationary. Fig. 7 illustrates lift affinities for school products of the present invention.

Please amend paragraph 0085 as shown. Note the added space between the words 'assuming' and 'price'.

Other metrics such as price elasticity  $\varepsilon_{ij}$  may also be used. Assuming price elasticity is estimated using a linear demand function,  $qty_i=w_{ij}^*price_i+constant$ ,  $\varepsilon_{ij}$  can be defined as:

Please amend paragraph 0088 as shown:

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Cooperation occurs when a sale on one product benefits another, and vice versa. Parasitism (and exploitation) occurs when a sale on A benefits B, but a sale on B then proceeds to cannibalize A. For example, gravy and stuffing are mutual cooperators. Potato chips could be parasitic on regular sales in the store.

Please amend paragraph 0091 as shown.

Figure <u>8</u> 7-shows a 411 day, 30-day moving sum for "Peter Pan crunchy peanut butter 18oz". Around day 65 both "Smuckers strawberry jam" and "Bush's baked beans vegetarian" went on sale, represented by a drop in their prices. Simultaneously there was a demand increase in peanut butter. Therefore, the correlation statistic reveals that price of Smucker's strawberry jam and Bush's baked beans are both negatively correlated with demand in peanut butter. Therefore, the drops in prices of these items increase the sales of Crunchy Peanut Butter.

Please amend paragraph 0092 as shown:

One problem with price <u>cannibalization</u> eannibaliation is that several items could have had price reductions at the same time, and all would show correlations, and be considered possible drivers. Therefore, this analysis is most reliable when a number of price changes have occurred in a non-correlated fashion, when a large amount of data is available, and when extraneous factors have been controlled or taken into account.